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10/807,453	03/24/2004	Norihiko Yamada	118970	3366
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/807,453

Applicant(s)

YAMADA, NORIHIKO

Examiner

YUK CHOW

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
4a) Of the above claim(s) 8 and 17-46 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-7 and 9-16 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 and 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (US 2004/0048663) in view of Oh (US 6,440,039).

As to **claims 1-4**, Cheng discloses an information display system, comprising:

an information processing apparatus (Fig. 4(450));

an information display apparatus which displays display image information held in the information processing apparatus, on a display surface (Fig. 4(10)); and

a pointing apparatus which points at an arbitrary position on a display image displayed by the information display apparatus, the pointing apparatus including (Fig. 4(400)),

an imaging device (Fig. 4(430)) that images a representation containing the position at which the pointing apparatus is to point on the display image at an imaging point of time, and outputs imaged image information corresponding to the representation (see [0031]-[0033]),

the information processing apparatus including, a pointing coordinate specification device to accept the imaged image information from the pointing apparatus (Fig. 5(Step 330)), decide which part of display image information corresponding to the

display image at an imaging point of time the imaged image information corresponds to, and specify coordinates of the position at which the pointing apparatus is to point, as pointing coordinates from a result of the decision (Fig. 5(step340-step360)),

a display image information storage device to store the display image information therein (Fig. 5(370)), and

a display image information generation device to composite a pointer cursor to and at the specified pointing coordinates on the display image information (Fig. 5(step380)).

However, Cheng's representation of image may not necessarily be a representation of less than an entire portion of an image on the display surface.

Oh discloses a shooting game machine wherein teaches a representation of screen (see Fig. 4A(GP)) which is less than an entire portion of display surface (Fig. 4A(1a)).

It would have been obvious to one ordinary skill in the art at the time of invention was made to use less than an entire portion of an image on the display surface as in Oh into photographic pointer positioning device of Cheng, because this improves accuracy and speed by using only partial area of frame memory (see Oh Col. 1 line 64 - Col. 2 line 26).

As to **claim 5**, Cheng and Oh disclose the information display system as defined in claim 1, further comprising:

the representation to be imaged being an imagable representation which is set by a collimation device included in the imaging device, and the central part of the

imagable representation set by the collimation device being the position at which the pointing apparatus is to point, the coordinates of the position being acquired as the pointing coordinates (see [0037]-[0038]).

As to **claim 6**, Cheng and Oh disclose the information display system as defined in claim 1, further comprising:

the decision on which part of the display image information corresponding to the display image at the imaging point of time the imaged image information corresponds to, being rendered by generating template image information from the imaged image information, and then performing pattern matching between the template image information and the display image information corresponding to the display image at the imaging point of time (see [0039]-[0041]).

As to **claim 7**, Cheng and Oh disclose the information display system as defined in claim 1, the pointing apparatus being a portable information equipment which has an imaging function (Fig. 4(430)) and a communication function (Fig. 4(420)).

As to **claim 9**, Cheng and Oh disclose an information processing apparatus for use in the information display system as defined in claim 1, comprising:

functions of accepting the imaged image information outputted from the pointing apparatus (Fig. 5(step 330)), deciding which part of the display image information corresponding to the display image at the imaging point of time the imaged image information corresponds to, specifying the position at which the pointing apparatus is to point, as the pointing coordinates from the result of the decision (Fig. 5(Step 340-370)),

and thereafter compositing and displaying the pointer cursor to and at the specified pointing coordinates on the display image information (Fig. 5(Step 380)).

As to **claim 10**, Cheng and Oh disclose a pointing apparatus for use in the information display system as defined in claim 2, comprising:

functions of deciding which part of the display image information corresponding to the display image at the imaging point of time the imaged image information by the imaging device corresponds to, and specifying the coordinates of the position at which the pointing apparatus is to point, as the pointing coordinates from the result of the decision (Fig. 5(Step 340-370)).

As to **claim 11**, Cheng and Oh disclose a computer program product comprising a CPU-useable medium having a CPU-readable program, wherein the CPU-readable program when executed on a CPU cause the CPU to be performed by the information processing apparatus according to claim 9 comprising:

An instruction for causing a computer executing the instruction to accept the imaged image information outputted from the pointing apparatus (Fig. 5(step 330)), and deciding which part of the display image information corresponding to the display image at the imaging point of time the imaged image information corresponds to, and specifying the position at which the pointing apparatus is to point, as the pointing coordinates from the result of the decision (Fig. 5(Step 340-370)), and thereafter compositing and displaying the pointer cursor to and at the specified pointing coordinates on the display image information (Fig. 5(Step 380)).

As to **claim 12**, Cheng and Oh disclose a computer program product comprising a CPU-useable medium having a CPU-readable program, wherein the CPU-readable program when executed on a CPU cause the CPU to be performed by the information processing apparatus according to claim 10 comprising:

An instruction for causing a computer executing the instruction to decide which part of the display image information corresponding to the display image at the imaging point of time the imaged image information from the imaging device corresponds to, and specifying the coordinates of the position at which the pointing apparatus is to point, as the pointing coordinates from the result of the decision (Fig. 5(Step 340-370)).

As to **claim 13**, Cheng discloses a pointer cursor display method in an information display system having an information processing apparatus, an information display apparatus which displays display image information held in the information processing apparatus, on a display surface, and a pointing apparatus which points at an arbitrary position on a display image displayed by the information display apparatus, comprising:

the pointing apparatus images a representation containing the position at which it is to point on the display image at an imaging point of time, by an imaging device included in the pointing apparatus (Fig. 5(Step 310)), and outputs imaged image information corresponding to the representation, onto the information processing apparatus (See Fig. 5(Step 320)), and

the information processing apparatus side accepts the imaged image information and the pointing coordinate motion vector from the pointing apparatus (Fig. 5(Step

330)), decides which part of the display image information corresponding to the display image that the imaged image information at the imaging point of time corresponds to, specifies the position at which the pointing apparatus is to point, as pointing coordinates from a result of the decision (Fig. 5(step 340-370)), and thereafter composites and displays a pointer cursor to and at the specified pointing coordinates on the display image information (Fig. 5(Step 380)).

However, Cheng's representation of image may not necessarily be a representation of less than an entire portion of an image on the display surface.

Oh discloses a shooting game machine wherein teaches a representation of screen (see Fig. 4A(GP)) which is less than an entire portion of display surface (Fig. 4A(1a)).

It would have been obvious to one ordinary skill in the art at the time of invention was made to use less than an entire portion of an image on the display surface as in Oh into photographic pointer positioning device of Cheng, because this improves accuracy and speed by using only partial area of frame memory (see Oh Col. 1 line 64 - Col. 2 line 26).

As to **claim 14**, Cheng discloses a pointer cursor display method in an information display system having an information processing apparatus, an information display apparatus which displays display image information held in the information processing apparatus, on a display surface, and a pointing apparatus which points at an arbitrary position on a display image displayed by the information display apparatus, comprising:

the pointing apparatus images a representation containing the position at which it is to point on the display image at an imaging point of time, by an imaging device included in the pointing apparatus (Fig. 5(Step 310)), obtains imaged image information corresponding to the representation (See Fig. 5(Step 320)), decides which part of the display image information corresponding to the display image that the imaged image information at the imaging point of time corresponds to, specifies the position at which the pointing apparatus is to point, as pointing coordinates from a result of the decision (Fig. 5(step 340-370)), and outputs pointing coordinate information for the specified pointing coordinates, to the information processing apparatus side, and the information processing apparatus side composites and displays a pointer. cursor to and at the pointing coordinate corresponding to the pointing coordinate information delivered from the pointing apparatus (Fig. 5(Step 380)).

However, Cheng's representation of image may not necessarily be a representation of less than an entire portion of an image on the display surface.

Oh discloses a shooting game machine wherein teaches a representation of screen (see Fig. 4A(GP)) which is less than an entire portion of display surface (Fig. 4A(1a)).

It would have been obvious to one ordinary skill in the art at the time of invention was made to use less than an entire portion of an image on the display surface as in Oh into photographic pointer positioning device of Cheng, because this improves accuracy and speed by using only partial area of frame memory (see Oh Col. 1 line 64 - Col. 2 line 26).

As to **claim 15**, Cheng and Oh disclose the pointer cursor display method in the information display system as defined in claim 13, further comprising:

the representation to be imaged being a imagable representation which is set by a collimation device included in the imaging device, and the central part of the imagable representation set by the collimation device being the position at which the pointing apparatus is to point, coordinates of the position being acquired as the pointing coordinates (see Cheng [0037]-[0038]).

As to **claim 16**, Cheng and Oh disclose the pointer cursor display method in the information display system as defined in claim 13, further comprising:

the decision on which part of the display image information corresponding to the display image at the imaging point of time the imaged image information corresponds to being rendered by generating template image information from the imaged image information, and then performing pattern matching between the template image information and the display image information corresponding to the display image at the imaging point of time (see Cheng [0039]-[0041]).

Response to Arguments

3. Applicant's arguments with respect to claim 1-7 and 9-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUK CHOW whose telephone number is (571)270-1544. The examiner can normally be reached on 8-6 M-TH E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. C./
Examiner, Art Unit 2629

/Amare Mengistu/
Supervisory Patent Examiner, Art Unit 2629